

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: June 18, 2001, 15:31:56 ; Search time 50.45 Seconds
(without alignments)
242.476 Million cell updates/sec

Title: US-09-653-755A-5

Perfect score: 1121

Sequence: 1 ENVLQSPALMSASPEKVT.....EATHTKSTSPIYKSFNRNC 214

Scoring table:

BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 390729 seqs, 57163235 residues

Total number of hits satisfying chosen parameters: 390729

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

A_Geneseq_0401.*
1: /SIDS6/gcgdata/geneseq/geneseqp/AA1980.DAT.*
2: /SIDS6/gcgdata/geneseq/geneseqp/AA1981.DAT.*
3: /SIDS6/gcgdata/geneseq/geneseqp/AA1982.DAT.*
4: /SIDS6/gcgdata/geneseq/geneseqp/AA1983.DAT.*
5: /SIDS6/gcgdata/geneseq/geneseqp/AA1984.DAT.*
6: /SIDS6/gcgdata/geneseq/geneseqp/AA1985.DAT.*
7: /SIDS6/gcgdata/geneseq/geneseqp/AA1986.DAT.*
8: /SIDS6/gcgdata/geneseq/geneseqp/AA1987.DAT.*
9: /SIDS6/gcgdata/geneseq/geneseqp/AA1988.DAT.*
10: /SIDS6/gcgdata/geneseq/geneseqp/AA1989.DAT.*
11: /SIDS6/gcgdata/geneseq/geneseqp/AA1990.DAT.*
12: /SIDS6/gcgdata/geneseq/geneseqp/AA1991.DAT.*
13: /SIDS6/gcgdata/geneseq/geneseqp/AA1992.DAT.*
14: /SIDS6/gcgdata/geneseq/geneseqp/AA1993.DAT.*
15: /SIDS6/gcgdata/geneseq/geneseqp/AA1994.DAT.*
16: /SIDS6/gcgdata/geneseq/geneseqp/AA1995.DAT.*
17: /SIDS6/gcgdata/geneseq/geneseqp/AA1996.DAT.*
18: /SIDS6/gcgdata/geneseq/geneseqp/AA1997.DAT.*
19: /SIDS6/gcgdata/geneseq/geneseqp/AA1998.DAT.*
20: /SIDS6/gcgdata/geneseq/geneseqp/AA1999.DAT.*
21: /SIDS6/gcgdata/geneseq/geneseqp/AA2000.DAT.*
22: /SIDS6/gcgdata/geneseq/geneseqp/AA2001.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1084.5	96.7	215	14	Mouse anti-bovine
2	1079.5	96.3	215	17	Anti-bGH monoclonal
3	1078.5	96.2	215	17	Murine anti-bGH MA
4	1009.5	90.1	235	17	Murine ASB57 Light
5	1009.5	90.1	235	20	Plasmid PE814/ASB7
6	1004	89.6	214	17	Antibody 7G12 light
7	993.5	88.6	213	10	Chimeric antibody
8	979.5	87.4	235	12	Monoclonal antibody
9	973.5	86.8	195	11	Light chain of ant
10	950	84.7	208	20	Mab Fab13B5 light
11	911	81.3	238	19	Anti-Fas Mab HFE7A

12	911	81.3	238	21	B14748
13	911	81.3	238	21	W90898
14	898.5	80.2	239	16	R76086
15	898.5	80.2	239	16	R76087
16	897	80.0	222	18	W01751
17	893	79.7	236	20	Y30116
18	893	79.7	236	20	Y30120
19	893	79.7	236	20	Y30122
20	892	79.6	216	17	W15935
21	885	78.9	220	15	R53602
22	884.5	78.9	219	14	R44495
23	883	78.8	214	18	W27089
24	882	78.7	218	16	R75457
25	882	78.7	218	16	R75459
26	882	78.7	234	16	W11918
27	877	78.2	223	5	P40031
28	873	77.9	215	16	R64202
29	864.5	77.1	238	18	W31752
30	864.5	77.1	238	19	W71889
31	864.5	77.1	238	21	B12909
32	859.5	76.7	215	15	R53603
33	858.5	76.6	219	21	Y95258
34	858	76.5	206	20	Y39452
35	856.5	76.4	219	15	R59416
36	855.5	76.3	235	15	R47449
37	855.5	76.3	235	15	R47451
38	853.5	76.1	219	21	Y68994
39	852.5	75.8	238	20	Y17416
40	850	75.8	212	15	R52659
41	849	75.7	218	16	R75461
42	846	75.5	209	16	R64204
43	843	75.2	215	20	R74781
44	842	75.1	235	20	Y30118
45	837.5	74.7	239	16	R66757

ALIGNMENTS

RESULT 1	
AC R43674	standard; Protein; 215 AA.
AC R43674:	
DT 23-MAY-1994	(first entry)
DE	Mouse anti-bovine growth hormone Mab light chain.
DE	Monoclonal antibody; Mab; affinity; binding; antigen; diagnostics;
KW	therapy; imaging; purification; biosensors.
OS	Mus musculus.
OS	
XX	US5260203-A.
XX	09-NOV-1993.
XX	
XX	02-SEP-1986;
XX	86US-0902971.
XX	
XX	02-SEP-1986;
XX	86US-0902971.
PR	02-SEP-1987;
PR	87US-0092110.
PR	19-JAN-1989;
PR	89US-0239617.
XX	25-APR-1990;
XX	90US-0512910.
XX	(ENZO-) ENZON INC.
PI	Bird RE, Hardman K, Ladner RC;
XX	
XX	WPI; 1993-367875/46.
DR	N-PSDB; Q51535.
XX	
PT	Single chain poly:peptide for binding antigen - comprising light

PT and heavy chain antigen binding portions linked by peptide linker
XX
PS Disclosure; Figure 22; 78pp; English.

CC This sequence is the mature light chain of a monoclonal antibody
CC (Mab) and is the starting material for the production of a single
CC chain polypeptide having binding affinity for a given antigen
CC (Bovine growth hormone). The polypeptide comprises a first
CC polypeptide comprising the antigen binding portion of of the light
CC chain variable region of an antibody and a second polypeptide
CC comprising the antigen binding portion of the heavy chain variable
CC region of an antibody and at least one peptide linker linking the
CC first and second polypeptide chains. The resulting single chain
CC polypeptide can be used in diagnostics, therapy
CC (in vivo and in vitro), imaging, purifications and biosensors.

XX
SQ Sequence 215 AA:

Query Match 96.7%; Score 1084.5; DB 14; Length 215;
Best Local Similarity 96.7%; Pred. No. 3.2e-59;
Matches 208; Conservative 4; Mismatches 2; Indels 1; Gaps 1;

QY 1 ENVLTQSPALFSGSGGKEATLTISSLVSSESSYLHWYRQKSGASPKLWYTSNLSAGVP 60
DB 1 envltqspalmsapgekltmcrasssvssylhwfqgksgaspklwystsnlasgvp 60
QY 61 ARFSGSGSTSYSLRTISSEAEADAATYYCOQYSGY-RTFGGGRKLEIKRADAPVTSIFP 119
DB 61 arfsgsgstsyslrtissveadaatyycoqysgyypiltfgagtkleikradapvtsifp 120
QY 120 PSEEDLTSGASGVCFLNFPYRDINVKWKIDGSEKQNVLSMTDQSKDSTYSMSSTL 179
DB 120 pseqdltsgasgvcflnfpyrdinvwkikdgserqnvlnswtdqskdstysmsstl 180
QY 180 TLTKEDEYERHNSYTCGATHTKSTSPYKSFNNEC 214
DB 181 tltkdeyerhnsytcgatkhtkstspivksfnrnc 215

RESULT 2
R99644
ID R99644 standard; Protein: 215 AA.
XX
AC R99644;
XX
DT 11-OCT-1996 (first entry)
XX
DE Anti-BGH monoclonal antibody light chain.

XX Antibody engineering; single polypeptide chain binding molecule;
KW heavy chain; light chain; monoclonal antibody; Mab;
KW bovine growth hormone; BGH; immunoaffinity purification.
XX
OS Mus sp.
XX
PN US5534621-A.
XX
PD 09-JUL-1996.
XX
PF 02-SEP-1986; 86US-0902971.
XX
PR 19-JAN-1989; 89US-0299617.
PR 02-SEP-1986; 86US-0902971.
PR 02-SEP-1987; 87US-0092110.
PR 25-APR-1990; 90US-0512910.
PR 01-APR-1993; 93US-0040440.
PR 06-JUN-1995; 95US-0468992.

PA (ENZO-) ENZON LABS INC.

XX Bird RE, Hardman K, Ladner RC;
XX

DR WPI: 1996-33309/33.
DR N-PSDB; T13734.
XX

PT Immuno-purificn. using single binding chain molecule including
PT antigen-binding parts of antibody light and heavy chain variable
PT regions connected by a linker - is smaller, stblier and less
XX expansive than complete antibodies

PS Example; Fig 22; 78pp; English.

CC The mature heavy chain (R99643) and mature light chain (R99644) of
CC the mouse anti-bovine growth hormone monoclonal antibody 3C2 can
CC be utilized in novel single chain binding molecules (R99645-48),
CC in which the hypervariable regions from IgG1 3C2 Mab are joined by
CC peptide linkers derived from the Fv regions of an IGA class anti-
CC phosphorylcholine myeloma antibody, MCPC-603. The single chain
CC molecules retain the binding specificity of the light and heavy
CC chains and have the advantages of smaller size, greater stability
CC and reduced cost. They can be used in therapy, diagnostics,
CC imaging, purification and biosensors.

XX
SQ Sequence 215 AA:

Query Match 96.3%; Score 1079.5; DB 17; Length 215;
Best Local Similarity 96.3%; Pred. No. 6.5e-59;
Matches 207; Conservative 5; Mismatches 2; Indels 1; Gaps 1;

QY 1 ENVLTQSPALFSGSGGKEATLTISSLVSSESSYLHWYRQKSGASPKLWYTSNLSAGVP 60
DB 1 envltqspalmsapgekltmcrasssvssylhwfqgksgaspklwystsnlasgvp 60
QY 61 ARFSGSGSTSYSLRTISSEAEADAATYYCOQYSGY-RTFGGGRKLEIKRADAPVTSIFP 119
DB 61 arfsgsgstsyslrtissveadaatyycoqysgyypiltfgagtkleikradapvtsifp 120
QY 120 PSEEDLTSGASGVCFLNFPYRDINVKWKIDGSEKQNVLSMTDQSKDSTYSMSSTL 179
DB 120 pseqdltsgasgvcflnfpyrdinvwkikdgserqnvlnswtdqskdstysmsstl 180
QY 180 TLTKEDEYERHNSYTCGATHTKSTSPYKSFNNEC 214
DB 181 tltkdeyerhnsytcgatkhtkstspivksfnrnc 215

RESULT 3
R97377
ID R97377 standard; Protein: 215 AA.
XX
AC R97377;
XX
DT 13-NOV-1996 (first entry)
XX
DE Murine anti-BGH Mab light chain.

XX Antibody engineering; monoclonal antibody; Mab; light chain;
KW single chain antibody; immunoassay; bovine growth hormone; BGH.
XX
OS Mus musculus.
XX
PN US5518889-A.
XX
PD 21-MAY-1996.
XX
PF 02-SEP-1986; 86US-0902971.
XX
PR 19-JAN-1989; 89US-0299617.
PR 02-SEP-1986; 86US-0902971.
PR 02-SEP-1987; 87US-0092110.
PR 25-APR-1990; 90US-0512910.
PR 01-APR-1993; 93US-0040440.
PR 06-JUN-1995; 95US-0468988.

(ENZO-) ENZON LABS INC.
PA Bird RE, Hardman K, Ladner RC;
PI WPI; 1996-259060/26.
DR N-PSDB; T29057.
XX
XX
PT Immunoassay using single chain antigen binding mol. - as replacement
PT for labelled or immobilised antibody, are less immunogenic, easier
PT to engineer, more stable and less expensive
XX
XX
PS Example 1; Fig 22; 78pp; English.
CC Portions of the heavy chain (R97376) and light chain (R97377) of
CC murine 19G1 anti-bovine growth hormone monoclonal antibody 3C2
CC can be incorporated into novel single polypeptide chain binding
CC molecules (see also W02188-90). These are expressed in host cells
CC using DNA constructs (see also T36460-62) that include heavy and
CC linker moieties. Following expression and refolding, the single
CC chain binding molecules show the binding characteristics of the
CC aggregate of the 2 original heavy and light chains of the variable
CC region of the antibody.
XX
XX
SQ Sequence 215 AA:

Query Match 96.2%; Score 1078.5; DB 17; Length 215;
Best Local Similarity 96.3%; Pred. No. 7.4e-59;
Matches 207; Conservative 4; Mismatches 3; Indels 1; Gaps 1;

QY 1 ENVLTSPTAITSAPGKRYMTGTCASSSSSYTHMYRQKSGAPKIMYSTNLASGVP 60
DB 1 ENVLTSPTAITSAPGKRYMTGTCASSSSSYTHMYRQKSGAPKIMYSTNLASGVP 60
QY 61 ARFSGSGSTSYSLTISSEAEADATYTCOYSGY-RTFEGGCTLEIKRADAPTVAIFP 119
DB 61 ARFSGSGSTSYSLTISSEAEADATYTCOYSGY-RTFEGGCTLEIKRADAPTVAIFP 120
QY 120 PSSEQLTSGASVVCFLNFFPRDINVKWKIDGSEKONGVLSWTDDSKDSTYSMSSTL 179
DB 121 PSSEQLTSGASVVCFLNFFPRDINVKWKIDGSEKONGVLSWTDDSKDSTYSMSSTL 180
QY 180 TLTDEYERHNSYTCENTHKTSTSPYKSFNRNCC 214
DB 181 TLTDEYERHNSYTCENTHKTSTSPYKSFNRNCC 215

RESULT 4
W06178 ID W06178 standard; Protein: 235 AA.
XX
XX AC W06178;
XX
XX DT 17-FEB-1997 (first entry)
XX
XX DE Murine A5B57 Light chain.
XX
XX KW ribonuclease; human; bovine; pancreatic; anti-tumour therapy; ADEPT;
XX KW mustard-ribonuclease; antibody directed enzyme prodng therapy;
XX KW anti-neoplastic; prodng; reverse polarity; ion pair interaction;
XX KW reduced immunogenicity; non-selective triggering; primer;
XX KW polymerase chain reaction; PCR; HP-RNase; Fd; F(ab')2.
XX
XX OS Synthetic.
XX
XX PN W09620011-A1.
XX
XX PD 04-JUL-1996.
XX
XX PF 21-DEC-1995; 95WO-GB02991.
XX
XX PR 16-AUG-1995; 95GB-0016810.

PR 23-DEC-1994; 94GB-0026192.
XX
XX PA (ZENEC) ZENEC LTD.
XX
XX PI Blakey DC, Boyle FT, Davies DH, Eggelte HJ, Heaton DM;
XX PI Henman JF, Hennequin LEA, Marsham PR, Rabin BR, Slater AM;
XX PI Terragona-Fiol A, Taylorson CJ;
XX
XX DR WPI; 1996-321650/32.
XX
XX DR N-PSDB; T42508.
XX
XX PT Two component system for anti-tumour therapy - comprising targeting
XX PT moiety linked to mutated enzyme which can transform an
XX PT anti-neoplastic prodng
XX
XX PS Example 6; Page 119-120; 182pp; English.
XX
XX CC A two-component system for anti-tumour therapy comprises a targeting
XX CC moiety linked to a mutated enzyme which can transform an anti-neoplastic
XX CC prodng. The system is based on antibody directed enzyme prodng therapy
XX CC (ADEPT) using a non-naturally occurring mutant form of a host enzyme,
XX CC pref. human pancreatic ribonuclease (HP-RNase), (see T42478-83). The
XX CC targeting moiety can be an antibody, in partic. murine monoclonal
XX CC antibody A5B7 (which binds to human carcinoembryonic antigen). A5B7 is
XX CC suitable for targeting colorectal carcinoma. Fragments, esp. F(ab')2,
XX CC of the antibody can be conjugated to HP-RNase. A5B7 Fd and L chain
XX CC fragments were isolated by PCR using cDNA isolated from A5B7 hybridoma
XX CC cells. The present sequence is that of the murine A5B7 L chain.
XX
XX SQ Sequence 235 AA:

Query Match 90.1%; Score 1009.5; DB 17; Length 235;
Best Local Similarity 90.2%; Pred. No. 1.3e-54;
Matches 194; Conservative 10; Mismatches 8; Indels 3; Gaps 2;

QY 1 ENVLTSPTAITSAPGKRYMTGTCASSSSSYTHMYRQKSGAPKIMYSTNLASGVP 60
DB 23 QYVLSGSPALISAAPGKRYMTGTCASSSV--LYLHWYQKQKPSGPKWLYATSLASGVP 80
QY 61 ARFSGSGSTSYSLTISSEAEADATYTCOYSGY-RTFEGGCTLEIKRADAPTVAIFP 119
DB 61 ARFSGSGSTSYSLTISSEAEADATYTCOYSGY-RTFEGGCTLEIKRADAPTVAIFP 140
QY 81 ARFSGSGSTSYSLTISSEAEADATYTCOYSGY-RTFEGGCTLEIKRADAPTVAIFP 140
DB 81 ARFSGSGSTSYSLTISSEAEADATYTCOYSGY-RTFEGGCTLEIKRADAPTVAIFP 140
QY 120 PSSEQLTSGASVVCFLNFFPRDINVKWKIDGSEKONGVLSWTDDSKDSTYSMSSTL 179
DB 141 PSSEQLTSGASVVCFLNFFPRDINVKWKIDGSEKONGVLSWTDDSKDSTYSMSSTL 200
QY 180 TLTDEYERHNSYTCENTHKTSTSPYKSFNRNCC 214
DB 201 TLTDEYERHNSYTCENTHKTSTSPYKSFNRNCC 235

RESULT 5
W82746 ID W82746 standard; Protein: 235 AA.
XX
XX AC W82746;
XX
XX DT 10-MAY-1999 (first entry)
XX
XX DE Plasmid pEE14/A5B7/muVkmuck protein.
XX
XX KW Conjugate; cell targeting; cytotoxic drug; plasmid; fusion protein;
XX KW prodng-converting enzyme; cell surface antigen; treatment; cancer;
XX KW inflammation; rheumatoid arthritis; antibody; prodng therapy system.
XX
XX OS Synthetic.
XX
XX OS Mus sp.
XX
XX FH Key
XX FT Peptide
XX
XX FT Location/Qualifiers
XX FT 1..22
XX FT /label= signal_peptide

XX OS Mus.
XX KM KSI/4; chimeric antibody; light chain variable region;
XX PN EP38767-A.
XX PD 25-APR-1989.
XX PF 18-APR-1989; 89EP-0303814.
XX PR 21-APR-1988; 88US-0184522.
XX PA (ELIL) ELI LILLY AND CO.
XX PI Beavers LS, Bunol TF, Gadski RA, Weigel BJ;
XX DR WPI; 1989-311203/43.
XX DR N-PSDB; N91657.
XX PT Recombinant DNA cpds. producing antibodies - monoclonal and
XX PT chimeric derived from monoclonal antibody KSI/4.
XX PS Claim 1; page 49; 89pp; English.
XX CC The sequence encodes the light chain of Mab KSI/4, used to
XX CC construct mouse/human chimeric antibodies. KSI/4 is a murine antibody
XX CC which binds to surface antigens on adenocarcinoma cells and the use of
XX CC human C regions avoids immunological problems during treatment.
SQ Sequence 213 AA;

Query Match 88.6%; Score 993.5; DB 10; Length 213;
Best Local Similarity 90.6%; Pred. No. 1.1e-53;
Matches 193; Conservative 7; Mismatches 10; Indels 3; Gaps 2;
QY 3 VLTPSPAIMSAPGKXTMTTCRASSSVSSYLHMYRQSGSPKIMTSTNLSAGVPAR 62
DB 3 VLTSPAIMSAPGKXTMTTCRASSSVSSYLHMYRQSGSPKIMTSTNLSAGVPAR 60
QY 63 FSGSGSGTSYSLTISVFAEDATATYCCOYSGY-RTFGGTRKLEIKRADAPTYSIFPPS 121
DB 61 fsgsgsgtsyslitsvfaedatatyccqysgypftrfggtrkltkradaptyvsi fpps 120
QY 122 SEQLTSGASVYCEFLNNFPDINVKWKRIDGSEKONGVLNSWTDQSDSTYSMSSTLTL 181
DB 121 seqltsgasvycflnnfpkdnvkwkldgserqngvlnswtdqsdstysmsstl 180
QY 182 TKDEYERHNSYTCEATHTKSTSPYKSFNRNDC 214
DB 181 tkdeyerhnsytceathktspsivksfnrnec 213

RESULT 8
R13060
ID R13060 standard; Protein; 235 AA.
XX AC R13060;
XX XX
DT 03-OCT-1991 (first entry)
XX DE Monoclonal antibody OK3T light chain.
XX KM OK3T; light chain; humanised antibodies; CDR-grafting.
XX OS Mus musculus.
XX FH Key
XX FT Peptide
FT /label= signal peptide
FT Protein
FT /label= light chain

XX PN WO9109967-A.
XX PN WO9109968-A.
XX XX
XX PD 11-JUL-1991.
XX PF 21-DEC-1990; 90WO-GB02017.
XX PR 21-DEC-1990; 90WO-GB02017.
XX PR 21-DEC-1989; 89GB-0028874.
XX PA (CELL-) CELLTech LTD.
XX PI Adair JR, Atwal DS, Emtage JS;
XX DR WPI; 1991-222915/30.
XX DR P-PSDB; R13060.
XX PT New humanised antibodies comprising CDR grafted antibody - with
XX PT heavy and light chains, for use in in vivo therapy and diagnosis
XX PS Disclosure; Fig 1b; 91pp; English.
XX CC The OK3T light chain sequence was deduced from the cDNA sequence
XX CC isolated from a library prepared from OK3T producing cells. The
XX CC library was screened with a probe complementary to a region in the
XX CC mouse kappa constant region. The OK3T sequence was used in CDR-
XX CC grafting experiments to prepare humanised antibodies.
SQ Sequence 235 AA;

Query Match 87.4%; Score 979.5; DB 12; Length 235;
Best Local Similarity 89.2%; Pred. No. 8.4e-53;
Matches 190; Conservative 6; Mismatches 14; Indels 3; Gaps 2;
QY 3 VLTPSPAIMSAPGKXTMTTCRASSSVSSYLHMYRQSGSPKIMTSTNLSAGVPAR 62
DB 25 VLTSPAIMSAPGKXTMTTCRASSSVSSYLHMYRQSGSPKIMTSTNLSAGVPAR 82
QY 63 FSGSGSGTSYSLTISVFAEDATATYCCOYSGY-RTFGGTRKLEIKRADAPTYSIFPPS 121
DB 83 fsgsgsgtsyslitsvfaedatatyccqwsnptftrfggtrkltkradaptyvsi fpps 142
QY 122 SEQLTSGASVYCEFLNNFPDINVKWKRIDGSEKONGVLNSWTDQSDSTYSMSSTLTL 181
DB 143 seqltsgasvycflnnfpkdnvkwkldgserqngvlnswtdqsdstysmsstl 202
QY 182 TKDEYERHNSYTCEATHTKSTSPYKSFNRNDC 214
DB 203 tkdeyerhnsytceathktspsivksfnrnec 235

RESULT 9
R06477
ID R06477 standard; protein; 195 AA.
XX AC R06477;
XX XX
DT 07-JAN-1991 (first entry)
XX DE Light chain of anti-bovine growth hormone Mab.
XX KM Monoclonal antibody.
XX OS Mus musculus.
XX FH US4946778-A.
XX PN US4946778-A.
XX PD 07-AUG-1990.
XX PF 19-JAN-1989; 89US-0299617.
XX XX

KW glomerular nephritis; hypoplastic anaemia; hepatitis; AIDS;
 KW transplant rejection; therapy; complementarity determining region;
 KW CDR.

OS Mus musculus.

XX Key Location/Qualifiers

XX Peptide 1..20

XX Protein /label= Sig-peptide

XX Region /label= Mat-protein

XX Region 21..131

XX Region /label= Variable

XX Region 132..238

XX Region /label= Constant

XX Region 44..58

XX Region /label= CDR_L1

XX Region /note= "claim 9"

XX Region 74..80

XX Region /label= CDR_L2

XX Region /note= "claim 9"

XX Region 113..121

XX Region /label= CDR_L3

XX Region /note= "claim 9"

XX AU9859701-A.

XX 08-OCT-1998.

XX 30-MAR-1998; 98AU-0059701.

XX 08-OCT-1997; 97JP-0276064.

XX 01-APR-1997; 97JP-0082953.

XX 25-JUN-1997; 97JP-0169088.

XX (SANKY) SANKYO CO LTD.

XX Akio S, Hideyuki H, Hiroko Y, Jun O, Kimihisa I;

XX Masahiko O, Nobufusa S, Shin Y, Tohru T;

XX WPI: 1998-543440/47.

XX N-PSDB; V70130.

XX New antibodies and proteins bind conserved epitope of Fas antigen -

XX used to evaluate drugs in animal models and to treat Fas-associated

XX diseases e.g. autoimmune disease, allergy, atopy, arteriosclerosis,

XX myocarditis, hepatitis and AIDS

XX Reference Example 4; Page 189-190; 292pp; English.

XX This is the amino acid of the light chain of murine anti-human Fas

XX monoclonal antibody HFE7A. cDNA (see V70130) encoding the light

XX chain was obtained from HFE7A-secreting hybridoma (FERM-BP-5828)

XX RNA by RT-PCR (see V70127-28). The invention provides humanised

XX HFE7A antibodies (see W83031-37) produced by CDR grafting. These

XX antibodies are capable of inducing apoptosis in abnormal cells

XX expressing Fas, and of inhibiting Fas-induced apoptosis in normal

XX cells. They are used to evaluate, in animal models, treatments of

XX diseases that involve Fas/Fas ligand interactions, and also to treat

XX such diseases, including autoimmune disease (e.g. systemic lupus

XX erythematosus, Hashimoto's disease, graft versus host disease,

XX Sjogren syndrome, pernicious anaemia, Addison's disease,

XX scleroderma, Goodpasture syndrome, Crohn's disease, rheumatoid

XX arthritis, autoimmune haemolytic anaemia, sterility, myasthenia

XX gravis, multiple sclerosis, Basedow's disease, thrombopenia purpura

XX and insulin-dependent diabetes), allergies, atopy, arteriosclerosis,

XX myocarditis, cardiomyopathy, glomerular nephritis, hypoplastic

XX anaemia, hepatitis, AIDS and transplant rejection (all claimed).

XX Sequence 238 AA;

XX

Query Match

81.3%; Score 911; DB 19; Length 238;

Best Local Similarity 81.0%; Pred. No. 1,2e-48;
 Matches 175; Conservative 16; Mismatches 21; Indels 4; Gaps 2;

QY 3 VLTGSPAINMSAPGKVTWTCRASSV---SSSYLHWYRQKSGASPKMTITSTSLASGV 59

DB 23 VLTGSPAINMSAPGKVTWTCRASSV---SSSYLHWYRQKSGASPKMTITSTSLASGV 82

QY 60 PARFSGSGSTSTSLTSSVEADAATYCCOXS-CYTFGGGTLEIKRADAATVSLF 118

DB 83 PARFSGSGSTSTSLTSSVEADAATYCCOXS-CYTFGGGTLEIKRADAATVSLF 142

QY 119 PSSSQLTSGASVVCFLNFPYRDINWKIDGSEKONGVNSMTDQSKSTYSMSST 178

DB 143 PSSSQLTSGASVVCFLNFPYRDINWKIDGSEKONGVNSMTDQSKSTYSMSST 202

QY 179 LTLTKDEYERHNSYTCATHTKSTSPYKSFNRNCC 214

DB 203 LTLTKDEYERHNSYTCATHTKSTSPYKSFNRNCC 238

RESULT 12

BI4748 standard; Protein; 238 AA.

XX BI4748;

XX 24-NOV-2000 (first entry)

XX Mouse anti-Fas antibody HFE7A light chain.

XX Anti-Fas antibody; monoclonal antibody HFE7A; FERM-BP-5828;

XX murine; complementarity determining region; CDR; human Fas;

XX Fas ligand; apoptosis modulator; programmed cell death;

XX autoimmune disease; allergy; atopy; arteriosclerosis; myocarditis;

XX cardiomyopathy; glomerulonephritis; aplastic anaemia; panmyelophthisis;

XX hepatitis; AIDS; graft rejection; light chain.

XX Mus musculus.

XX WPI: 2000-485645/43.

XX N-PSDB; A72109.

XX 20-JUN-2000.

XX 30-SEP-1999; 99JP-0278301.

XX 30-SEP-1998; 98JP-0276883.

XX (SANKY) SANKYO CO LTD.

XX WPI: 2000-485645/43.

XX N-PSDB; A72109.

XX Preventive or treating agent for the diseases caused by an abnormality

XX in the Fas/Fas ligand system e.g. autoimmune diseases, contains

XX anti-Fas antibody -

XX Example 4; Page 70; 139pp; Japanese.

XX The invention relates to compositions for the prevention or treatment

XX or diseases caused by an abnormality in the Fas/Fas ligand system

XX containing an anti-Fas antibody as the active component. The anti-Fas

XX antibody is either the murine anti-human Fas monoclonal antibody HFE7A,

XX or a humanised version of HFE7A containing identical CDRs

XX (complementarity determining regions) to antibody HFE7A. Via its

XX interaction with Fas, the antibody of the invention acts as a modulator

XX of apoptosis. The compositions of the invention may therefore be used in

XX the treatment or prevention of conditions such as autoimmune diseases,

XX allergy, atopy, arteriosclerosis, myocarditis, cardiomyopathy,

XX glomerulonephritis, aplastic anaemia (panmyelophthisis), hepatitis, AIDS

XX and organ graft rejection. The present sequence represents the

XX light chain of the murine anti-human Fas monoclonal antibody HFE7A,

XX which is produced by hybridoma HFE7A (FERM-BP-5828).

PR 03-JUN-1994; 94GB-0011089;
PR 03-DEC-1993; 93GB-0024819.
XX
PA (ZENE) ZENECA LTD.
PI Blakey DC, Boot C, Copley CG, Hall SM, Paterson DS;
PI Rose MS, Wright AF;
XX
DR WPI; 1995-215262/28.
PT Antigen binding structures containing CDRs recognising the CA55.1
PT antigen - produced by hybridomas and host cells, for use in the
PT diagnosis and therapy of cancer
XX
PS Claim 3; Page 98; 121pp; English.
XX
CC An antigen binding structure is based on the CDRs (given in R76078-
CC 84) of the heavy (R76085) and light (R76086) chains of Mab 55.1
CC (ECACC 93081901), which recognises the colorectal tumor-associated
CC antigen CA55.1. It is optionally humanized and in the form F(ab')₂,
CC F(ab)'₂, Fab, Fv, scFv or V-min, and is produced in transgenic
CC animals or plants.
XX
SQ Sequence 219 AA;

Query Match 80.2%; Score 898.5; DB 16; Length 219;
Best Local Similarity 79.3%; Pred. No. 6.5e-48;
Matches 172; Conservative 18; Mismatches 22; Indels 5; Gaps 1;

QY 3 VLQSPAIMSASPGEKWTMTCRASSVS---YLHWYRQKSGASPKLMIYSTNLAS 57
DB 3 ymgspspslavsgsketymckssqslinsrtknylawyqgprgspklliywascrt 62
63 gvpdrftgsgsgtdftltissvgaedlaityckqsyrlrtfgggtkleikrdaapvsl 122
QY 58 GVPARFSGSGSGTSYSLTISVSEAEADATYYCOQYSGYRTFGGSKLEIKRADAAPTYSI 117
DB 118 FPPSEDLTSGGASVCFNNFYPRDINVKWKIDGSRQGVNLSWTDQSKDSTYMS 177
123 fppseqiltsgasvvcflmitypkdinvkwidgserqgvlnswtdqskdstymss 182
QY 178 TLTLTKDEYERHNSYTCEATHTKSTSPIVKSFNNEC 214
DB 183 tliltkdeyerhnsytceathkstspivksfnne 219

RESULT 15
R76087
ID R76087 standard: Protein; 239 AA.
XX
AC R76087;
XX
DT 21-NOV-1995 (first entry)
XX
DE Mab 55.1 light chain.
XX
KW Antigen binding structure; complementarity determining region; CDR;
KW CA55.1; colorectal cancer; tumor-associated antigen; hybridoma;
KW monoclonal antibody; Mab; immunotherapy; therapy; diagnosis;
KW transgenic animal; transgenic plant; antibody engineering;
KW humanized antibody; immunotoxin.
XX
OS Mus sp.
XX
XX
FH Key
FH Peptide 1..20 Location/Qualifiers
FT /label= Sig_peptide
FT 21..239
FT Protein /label= Mat_protein
FT /note= "Claim 3, page 98"
XX
PN W09515382-A.

XX
PD 08-JUN-1995.
XX
PF 29-NOV-1994; 94WO-GB02610.
XX
PR 03-JUN-1994; 94GB-0011089.
PR 03-DEC-1993; 93GB-0024819.
XX
PA (ZENE) ZENECA LTD.
PI Blakey DC, Boot C, Copley CG, Hall SM, Paterson DS;
PI Rose MS, Wright AF;
XX
DR WPI; 1995-215262/28.
DR N-PSDB; 094036.
XX
PT Antigen binding structures containing CDRs recognising the CA55.1
PT antigen - produced by hybridomas and host cells, for use in the
PT diagnosis and therapy of cancer
XX
PS Disclosure; Fig.16; 121pp; English.
XX
CC Mab 55.1 (ECACC 93081901) recognises the colorectal tumor-associated
CC antigen CA55.1. cDNAs for the heavy (094037) and light (094036)
CC chains of 55.1 were isolated, and F(ab)'₂, Fab, Fv, scFv or
CC V-min humanized 55.1 constructs have been expressed in myeloma
CC cells and E. coli.
XX
SQ Sequence 239 AA;

Query Match 80.2%; Score 898.5; DB 16; Length 239;
Best Local Similarity 79.3%; Pred. No. 7.1e-48;
Matches 172; Conservative 18; Mismatches 22; Indels 5; Gaps 1;

QY 3 VLQSPAIMSASPGEKWTMTCRASSVS---YLHWYRQKSGASPKLMIYSTNLAS 57
DB 23 ymgspspslavsgsketymckssqslinsrtknylawyqgprgspklliywascrt 82
83 gvpdrftgsgsgtdftltissvgaedlaityckqsyrlrtfgggtkleikrdaapvsl 142
QY 58 GVPARFSGSGSGTSYSLTISVSEAEADATYYCOQYSGYRTFGGSKLEIKRADAAPTYSI 117
DB 83 gvpdrftgsgsgtdftltissvgaedlaityckqsyrlrtfgggtkleikrdaapvsl 142
QY 118 FPPSEDLTSGGASVCFNNFYPRDINVKWKIDGSRQGVNLSWTDQSKDSTYMS 177
DB 143 fppseqiltsgasvvcflmitypkdinvkwidgserqgvlnswtdqskdstymss 202
QY 178 TLTLTKDEYERHNSYTCEATHTKSTSPIVKSFNNEC 214
DB 203 tliltkdeyerhnsytceathkstspivksfnne 239

Search completed: June 18, 2001, 15:31:57
Job time: 145 sec

